mer's labour in getting up and chasing out the intruders for a sufficient distance as noise works better—the cattle tend to run beyond audible limits.

During day hours, birds can be frightened off likewise.

The beauty of this alarm lies in its simplicity yet remarkable efficiency and further that all the ingredients are locally available, absolutely.

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# *MANGIFERA CAMPTOSPERMA* PIERRE—AN INTERESTING ADDITION TO THE INDIAN FLORA FROM GREAT NICOBAR ISLAND

During a joint scientific expedition to the Great Nicobar Island in 1966, the senior author collected a species of *Mangifera* with immature fruits and could not confirm its identity for lack of flowers and mature fruits. In 1977, more specimens of this species with mature fruits were collected by the junior author. A critical study revealed that the species in question is *Mangifera camptosperma* Pierre, a native of Vietnam and found also in Thailand and Burma. In India there are 3 species of *Mangifera* (*M. indica* L., *M. sylvatica* Roxb. and *M. andamanica* King). The present finding of *M. camptosperma* Pierre from the Great Nicobar Island constitutes an addition to the Indian Flora.

It is interesting to point out that the fruit of this species is flat and has the odour and taste of cultivated Mango except that the mesocarp is thin and fibrous, and the seed occupies the major portion of the fruit. The wild species may prove useful in improving our cultivated varieties and can be conserved in our germplasm collections, as mentioned in an earlier publication (Thothathri, 1973). A description together with an illustration of *M. camptosperma* is therefore presented in this paper.

Large trees; 30 m high, growing in the interior beach and low land forests in sandy loam. *Leaves* oblong, 14-45 × 4-8 cm, cuneate at bose, acuminate to caudate entire, glabrous; lateral nerves 15-20 pairs; petioles 1.5-2.8 cm, glabrous pulvinate. *Fruits* flat, elliptic, 6-9 × 6-8 cm, green when unripe and yellow when ripe; epicarp thin, mesocarp fibrous, 0.8-3.0 cm thick, endocarp woody. *Seeds* reniform 5 × 3 cm, filling most of the cavity of the stone.

Flowering material has not been collected as yet.

*Frts*: March-July.

*Distrib.*: India (Andaman and Nicobar Islands); Vietnam, Thailand and Burma.

*Specimens examined*: NICOBARS: East coast forest, Campbell bay, Great Nicobar Island, 4.3.1966, *Thothathri & Banerjee* 11369 (CAL); Campbell bay to Chengappa bay, Great Nicobar Island, 11.6.1977, *Balakrishnan* 5705 (PBL); 30 km on road to Pygalmalion point from Campbell bay, 19.7.1977, *Balakrishnan* 5858 (CAL, PBL). ANDAMANS: South Andaman, Jirkatang III, 13.4.1977, *Balakrishnan* 5508 (PBL).

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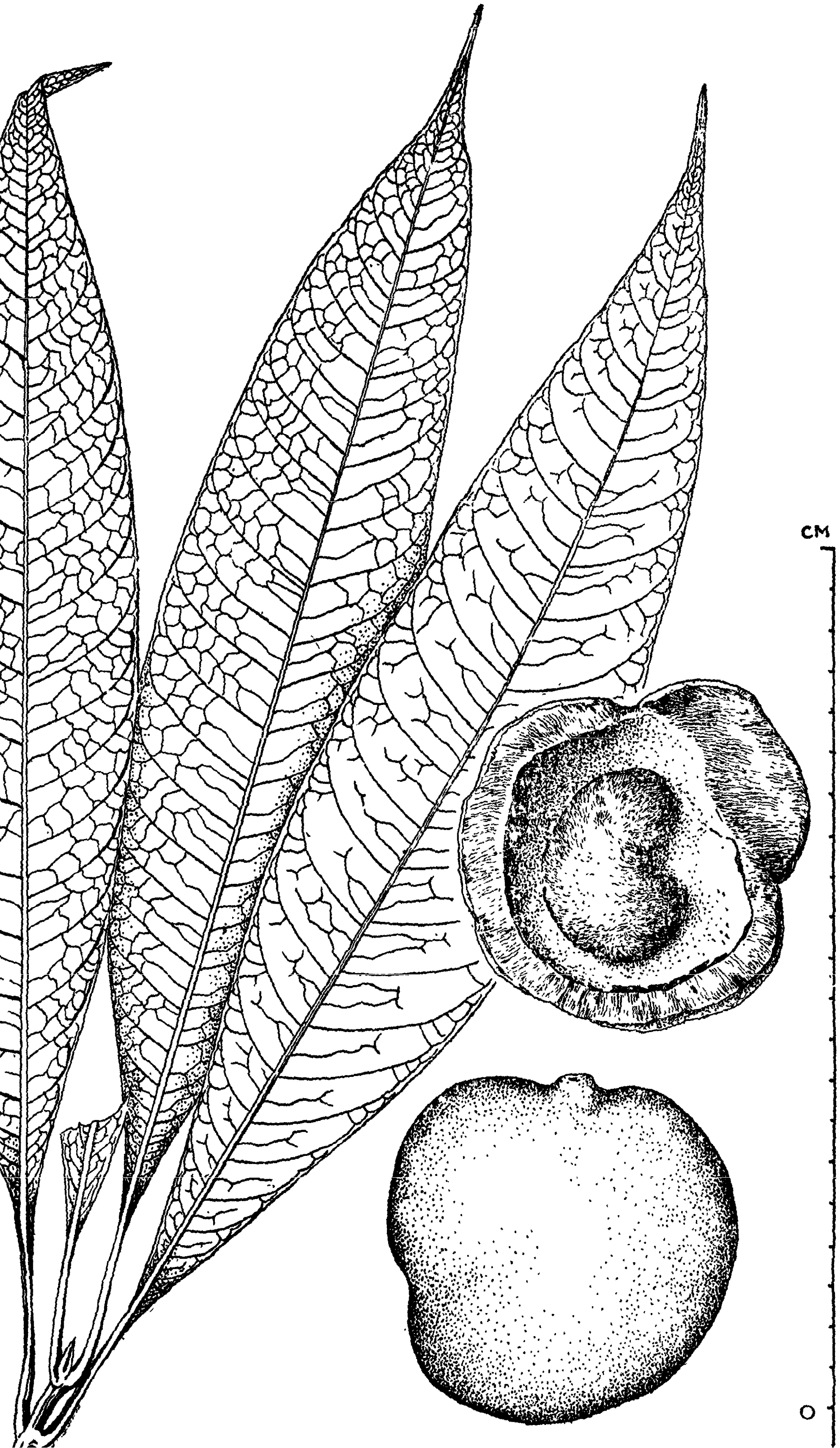

*Mangifera camptosperma* Pierre

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# OBSERVATION ON DOUBLE COCONUT IN THE INDIAN BOTANIC GARDEN

**1. Lodoicea maldivica** (J. F. Gmel.) Pers. (Arecaceae)—Fig. 1.

Commonly known as *Double coconut* or *coco de Mer* **Lodoicea maldivica** (J. F. Gmel.) Pers. (Syn. *L. seychellarum* Labill) is a very large palm with gigantic leaves and bearing the largest seed in the plant kingdom. For centuries the seed was attributed to have a supernatural origin until the tree itself was discovered in 1743.

It is an indigenous plant of Seychelles found in Praslin ('Isle of Palms) and Curieuse Island, and is protected by law, as the demand for nuts by tourists and others constitutes a threat to the species. Recently Government of the Republic of Seychelles has taken over the sole distribution and sale of the nut at a fixed price for controlling over-exploitation.

This wonderful plant was introduced in the Indian Botanic Garden in 1894 and cultivated in the Large Palm House located in Divn. No. 17. Germination of the seed and initiation of the first two leaves took about ten years. One leaf is produced at a time in a very close spiral to the left, around the stem. Growth of the plant is very slow, apparently 3-4 cm a year. The base of the tree lies about 2 m under the ground. The sheathing bases of older leaves are still persisting around the trunk measuring together about 25-28 cm across (including the bases). The crown is about 10 m in height. The leaf arises like a large rod, gradually appearing as a folded fan and later opening into a broadly ovate blade with subpendulous folds or segments, 4-10 cm broad. They are yellowish green, 4-6 m long and 2-4 m wide on stout stalks 2-4 m long, the bases

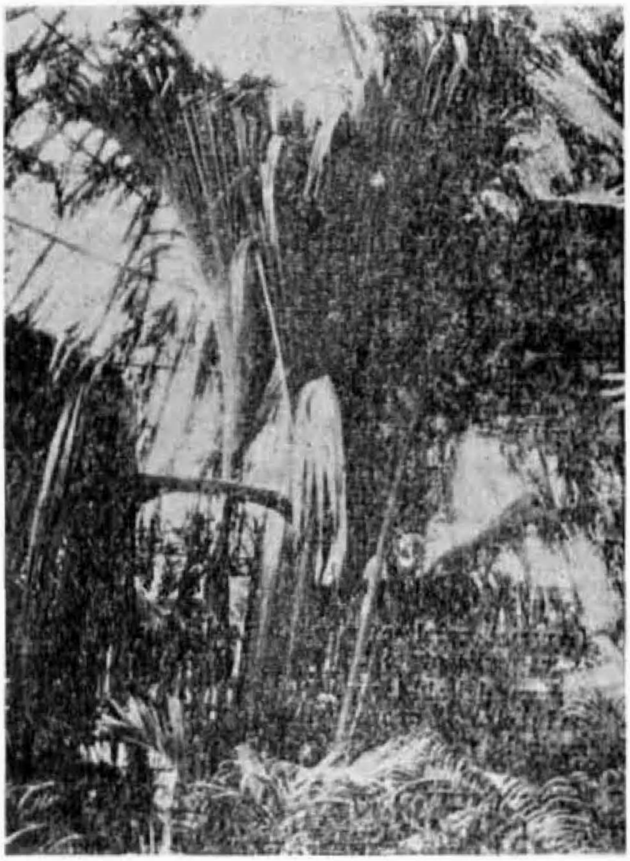

Fig. 1. *Lodoicea maldivica* (G. F. Gmel.) Pers. showing a view of the 86 years old tree.